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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,341	11/26/2003	Salvatore Polizzi	2110-90-3	5258
996	7590	01/25/2006	EXAMINER	
GRAYBEAL, JACKSON, HALEY LLP			DINH, SON T	
155 - 108TH AVENUE NE			ART UNIT	
SUITE 350			PAPER NUMBER	
BELLEVUE, WA 98004-5901			2824	

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/727,341

Applicant(s)

POLIZZI ET AL.

Examiner

Son T. Dinh

Art Unit

2824

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-24 is/are allowed.
- 6) ☒ Claim(s) 1,4 and 6 is/are rejected.
- 7) ☒ Claim(s) 2,3,5 and 7-10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/10/05</u> . | 6) <input checked="" type="checkbox"/> Other: <u>East search history</u> .              |

### **DETAILED ACTION**

The Restriction Requirement dated 9/7/05 has been withdrawn in view of the applicant arguments.

Claims 1-24 are pending in the application.

All claims are now examined.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Raza et al (U.S. Patent No 6,510,487).

For the purpose of this rejection “a serial communication protocol” would be considered as “a serial mode of operation) and “a pseudo parallel communication” would be considered as “a parallel mode of operation”. It is noted that in the specification the application just describe such operation as a serial mode and a parallel mode.

Raza et al disclose a memory device having an input/output interface (54, figure 4) that can operates in a serial mode and parallel mode. It is noted that elements 56, 60

and 62 in figure 4 of Raza would control the interface 54 to operate in either a serial mode or a parallel mode.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raza et al in view of Zhu et al (U. S. Patent 6,777,979).

Raza et al applied as above. The only difference between Raza et al and claims 4 and 6 is that Raza et al fail to teach the use of a latch register block for storing input and output data.

Zhu et al teach a memory device that operates in a serial mode and have a latch register block (450, figure 6) for storing input and output data. It is also that the selection of the number of registers just represents a design choice. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Raza et al by using a latch register block in a memory device that operates in a serial and parallel mode in order to store input and output data in a memory device as evidenced by Zhu et al.

***Allowable Subject Matter***

Claims 2-3, 5, 7-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fail to teach or suggest: “the circuit blocks comprises at least a state machine receiving a clock signal and a selection signal for activating the remaining block, an instruction decoder block for decoding in the SPI serial mode the various communication protocol commands and an enabling signal generator block for loading and address register” as claimed in the dependent claim 2; or

“eleven address pins for the address flow in the pseudo-parallel mode, one of them being used as input pin in the serial mode, as well as eight data pins for the pseudo-parallel mode, one of them being used as the output pin in the SPI serial mode” as claimed in the dependent claim 10; or

Claims 11-24 are allowed:

The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fail to teach or suggest:

-a method of operating a memory device comprising a serial operation in a normal mode and a parallel mode in a test mode as claimed in claim 11.

-“an interface coupled to the matrix of memory cells and coupled to pins of the memory device, the interface operate in a serial mode responsive to control signals applied on respective pins to serially receive addresses and data and to provide these addresses and data in parallel form to the matrix of memory cells, and operable in a parallel mode responsive to the control signals to receive parallel address and data applied on external pins and to apply this data in parallel form to the matrix of memory cells” as claimed in the independent claim 15.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

-Redwine et al disclose a memory device having a serial operation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son T. Dinh whose telephone number is 571-272-1868. The examiner can normally be reached on Monday to Friday 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Elms can be reached on 571-272-1869. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2824

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S. Dinh  
January 23, 2006



Son T. Dinh  
Primary Examiner